

CLAIMS

What is claimed is:

1. A circular saw blade, comprising:
an annular body constructed of a first material having a perimeter
5 with a plurality of shoulders formed into said perimeter; and
a plurality of inserts each affixed to a respective one of said
shoulders, said inserts formed of a second material and including a cutting
edge defined along a leading face, each said cutting edge including a first edge
surface generally parallel to an axis of rotation of the annular body and
10 including a second angled edge surface between 10° and 30° offset from
parallel to an axis of rotation of the annular body.
2. The saw blade according to claim 1, wherein said cutting edge of
said inserts include an interface between said first edge surface and said
15 second angled edge surface which is closer to a side of said annular body
wherein the interface of adjacent inserts are closer to alternate sides of the
annular body.
3. The saw blade according to claim 1, wherein said inserts are
20 formed from carbide.
4. The saw blade according to claim 3, wherein said carbide inserts
include approximately 8.6 percent TiC, 12 percent TaNbc, and 9.5 percent Co.
- 25 5. The saw blade according to claim 1, wherein said cutting edge of
said inserts include a back angle of between 5° and 15°.
6. The saw blade according to claim 5, wherein said back angle is
approximately 10°.

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7. An insert for a saw blade comprising:

a body portion defining a leading face having a cutting edge, a first and second side, and a bottom edge, said cutting edge defined by a first edge surface extending generally perpendicular from said first side and a second angled edge surface intersecting said first angled surface and extending between 100° and 120° from said second side.

8. The insert according to claim 7, wherein said body portion is made from carbide.

9. The insert according to claim 8, wherein said body portion includes approximately 8.6 percent TiC, 12 percent TaNbC, and 9.5 percent Co.

10. The insert according to claim 7, wherein said cutting edge includes a back angle of between 5° and 15°.

11. The insert according to claim 10, wherein said back angle is approximately 10°.

12. The insert according to claim 7, wherein said second angled edge surface extends at approximately 110° from said second side.